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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,119	01/20/2004	Zsolt Bor	2000-0062-03	3952
21773 7590 01/17/2007 CYMER INC LEGAL DEPARTMENT 17075 Thornmint Court SAN DIEGO, CA 92127-2413			EXAMINER NGUYEN, DUNG T	
			ART UNIT	PAPER NUMBER
			2828	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/17/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/762,119

Applicant(s)

BOR, ZSOLT

Examiner

Dung (Michael) T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 8-11 and 16-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 10, 16, 19, 21-23, 27-32 and 36-41 is/are rejected.
- 7) ☒ Claim(s) 3, 8, 9, 11, 17, 18, 20, 24-26 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

Claim 1 is objected to because of the following informalities: on last line, 'said test laser beam" should be "said laser beam". Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4, 10, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Horikoshi et al. (6813004).

With respect to claims 1-2, 4, 10, and 19, APA shows in Fig. 1-3 disclose an electric discharge narrow band gas laser with minimized wavelength variations caused by fluctuations in laser gas density resulting in laser beam directional changes comprising: A) a laser chamber (6), B) an elongated electrode structure enclosed within said chamber comprising an elongated anode and an elongated cathode separated by a distance defining a discharge region (it is inherent that a gas laser has the electrode structure), said discharge region defining a long dimension in a beam direction, C) a laser gas contained in said chamber, D) a fan (38) for circulating said laser gas within said chamber and through said discharge region, E) an output coupler (4) and a line

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narrowing module (2) defining a resonant cavity and laser beam direction, F) two chamber windows (7A-7B) having surfaces oriented substantially parallel to the surfaces of each other and at an angle between 40 and 70 degrees (Brewster's angle about 57 degrees on page 1, lines 13-14) with said beam direction.

APA lacks a fast beam deflection monitoring means to monitor deflection of said laser beam and a feedback control means for controlling said tuning means based on signals from said beam deflection monitoring means.

Horikoshi et al. teach in Fig.2 a fast beam deflection monitoring means 46 to monitor deflection of said laser beam and a feedback control means 50 for controlling said tuning means based on signals from said beam deflection monitoring means.

it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide APA what is taught by Horikoshi et al. in order to control the gas discharge laser properly (col.14, l.55-59).

With respect to claim 16, APA shows in Fig.2 shows a pivoting mirror (10) includes means for pivoting (20).

Claims 21-23, 27-29, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Horikoshi et al. (6813004) and further in view of Knowles et al. (5991324).

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With respect to claims 21-23, 30-32, and 36-41, APA and Horikoshi et al. disclose all limitations of the claims 1 and 4 except for the means (bandwidth stabilizer/pressure wave impact reducer) for reducing the impact of discharge produced pressure waves.

Knowles et al. teach the means (acoustic baffles 60 and 62 in Fig.3A) for reducing the impact of discharge produced pressure waves (col.5, lines 50-67 and col.6, lines 1-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide APA and Horikoshi et al. what is taught by Knowles et al. to order to reduce pulse quality distortion caused by acoustic shock (pressure) waves in the gas chamber (col.6, lines 9-11).

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2, 8-11, 14, 16-23, and 30-41 have been considered but are moot in view of the new ground(s) of rejection.

The indicated allowable subject matter in claims 27-29 are withdrawn based on newly found prior art of Horikoshi et al.

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*Allowable Subject Matter*

Claims 3, 8-9, 11, 17-18, 20, 24-26, and 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Communication Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.



Michael Dung Nguyen

1/4/07